

What is claimed is:

1. A method for use in network acquisition in a cellular radio communications device comprising the steps of:

storing details of the cell, as cell information, to which the device was connected at the time of loss of the network for at least first and second separate instances of network loss;

attempting network establishment on the basis of the stored details of one of the stored cells;

camping on said one stored cell if available but attempting network establishment on the basis of the stored details of the other of the cells if said one stored cell is not available;

camping on said other of the cells if available, and  
conducting a network cell search if none of the stored cells are available.

2. A method as claimed in Claim 1, and including the step of limiting the number of cells whose details are stored.

3. A method as claimed in Claim 2, wherein the number of cells is limited to a number whose details can be compared with the current cell details such in a period in the region of 0.5 seconds.

4. A method as claimed in Claim 2, and including the step of limiting the number of cells whose details are stored to no more than 20.

5. A method as claimed in Claim 1, and including the step of identifying whether the cell details to be stored have already been stored.

6. A method as claimed in Claim 1, wherein the network loss occurs through movement of the handset out of a coverage area.

7. A method as claimed in Claim 1, wherein the network loss arises through the cellular radio communication device being turned off.

8. A method as claimed in Claim 1, wherein the network cell search is arranged to omit frequencies of stored cell details already attempted.

9. A method as claimed in Claim 1, wherein the cell information comprises identification of a radio access technology and a carrier frequency.

10. A cellular radio communication device having storing means for storing details of the cell, as cell information, to which the device was connected at the time of loss of the network for at least first and second instances of network loss;

means for attempting network establishment on the basis of one of the first and second stored cells;

means for attempting network establishment on the basis of the other of the first and second stored cells if said one of the first and second cells is not available; and

means for initiating a network cell search if none of the stored cells are available for network camping.

11. A device as claimed in Claim 10, and including means for limiting the number of cells whose details are stored.

12. A device as claimed in Claim 11, wherein said number of cells is limited to a number that can be compared with the current cell details in a period in the region of 0.5 seconds.

13. A device as claimed in Claim 11, and including means for limiting the number of cells whose details are stored to no more than twenty.

14. A device as claimed in Claim 10, and including means for identifying whether the cell details to be stored have already been sorted.

15. A device as claimed in Claim 10, wherein the network loss occurs through movement of the handset out of a coverage area.

16. A device as claimed in Claim 10, wherein the network loss arises through the cellular radio communication device being turned off.

17. A method for use in network acquisition in a cellular radio communication device comprising the steps:

on turn off of the radio communication device,

identifying whether or not the current cell details that are the details at the turn off of the radio communication device are already stored;

shifting to a power off stage without storing of the current cell details, if the current cell details have been stored;

storing the current cell details, if the current cell details have not been stored;

determining whether or not the total number of cells whose details have been stored exceeds a threshold value;

shifting to the power off stage, if the threshold value has not been reached;

removing the oldest stored cell details from the stored cell details and shifting to the power off stage, if the threshold value has been reached;

on turn on the radio communication device,

checking whether or not the network acquisition can be achieved on the basis of one of the stored cell details;

performing the network camping and acquisition, if the network acquisition can be achieved;

checking whether or not all stored cells have been checked, if the one of the stored cell does not allow for the network acquisition;

incrementing the cell details as the next cell details to be checked, if not all stored cells have been checked;

performing a full cell search in the normal manner, if all stored cells have been checked;

determining whether or not the network is found by the full cell search;

performing an out of coverage procedure, if the network does not found by the full cell search; and

performing the network camping and acquisition, if the network is found by the full cell search.